

10-  
F287

# HOW TO REASON.

---

BY REV. CHARLES CHAPMAN, M. A.

---

## A LECTURE;

DELIVERED BEFORE THE YOUNG MEN'S ASSOCIATION OF ZION  
CHURCH, AND PUBLISHED AT THEIR  
REQUEST.

2nd November, 1871.

---

MONTREAL:

F. E. GRAFTON, PUBLISHER AND BOOKSELLER, ST. JAMES STREET.

1871.

LP  
F5012

1871  
C466



3 9004 01637315 8

*The* EDITH *and* LORNE PIERCE  
COLLECTION *of* CANADIANA



*Queen's University at Kingston*

---

GAZETTE PRINTING HOUSE, MONTREAL.

---

# HOW TO REASON.

---

*A Lecture delivered by the Rev. CHARLES CHAPMAN, M.A., before  
the Young Men's Association of Zion Church,  
on the 2nd November, 1871.*

THERE is, I think, always a degree of curiosity excited by the announcement of the subject of a lecture, which resolves itself into the form of such questions as,—“What will it be?”—“How will it be treated?”—“Will it be dry or interesting?” It is probable that some of you have asked substantially these questions with reference to the subject, “*How to Reason.*” You say,—“Are we going to be taught lessons of Logic, or are we to be entertained with examples of wisdom and folly in the reasoning of certain men and books?” Now, I may as well say once for all, that when I first thought of speaking to you on the subject announced, I had no intention of inflicting on you a dry and technical analysis of what may be termed the logical order of ideas involved in every process of sound argument; nor was it my purpose to entertain you by an exposure of some of the miserable sophisms which, under the cover of the name of Reason, have deluded generations of men. Nor, again, was I ambitious to create in your minds a wild delight in the mere exercise of your reasoning powers, irrespective of the matter in hand, and heedless of the occasion which requires it—a wild delight akin to that of the acrobat whose glory is to show to admiring eyes what a clever creature he is in twisting and twirling limbs and muscles as no other man can. I am of more common place and practical stuff than to seek such vague and unsatisfactory ends in a public lecture. The study of the formal laws of thought usually called Logic requires speciality of taste and real hard work if you are to make headway in it, and is more suited to the student's desk than to the social gathering where we seek to unite instruction on sound principles with such a degree of the light and cheery element as the close toil of daily life seems to demand for most of you. It is true many of the dialectical riddles of the sophists in the age of Socrates are amusing enough when looked at with the eye of modern utility; the fallacies which once reigned over the human intellect in the sphere of Natural Science, Government and Theology, are curious fossilised specimens, which, as antiquarians, we may collect and label for

occasional entertainment, yet I am of opinion that in the great press of topics of a more practical character which demand our attention, we may say of each of these intellectual mummies—*requiescat in pace*. And you may rest assured that as I do not want to see you distinguished above other young men for a carping, cynical, querulous, disputatious tone, so I hope to avoid everything which may tend to foster a mere fondness for disputation—the fruitful parent of these disagreeable qualities.

When the subject occurred to me as suitable for your association and the friends who might be disposed to assemble with us, I was thinking of the immense variety of topics which in these days, come into discussion among all classes of the community and of the risks which young men frequently run by attempting to deal with some of the more important of these, without having previously devoted attention to the methods of treating them on the most clear and unchallengeable principles of reason. One of the most remarkable features of the present generation is the incessant and unwearied activity of the public mind. Almost every subject, sacred and secular, is being subjected to an unrelenting, because unsatisfied scrutiny, and our popular literature is now devoted to the exposition or discussion of themes, once confined to the thoughtful consideration of students and men of literary leisure. It is, however, a mistake to imagine, as some not knowing literary history do, that in the present age the most important subjects of human interest have come to be discussed and scanned with keenly critical eyes for the first time. With the exception of researches in the domain of physical science and of sacred and profane history, there has not been any very decided advance upon the conclusions arrived at in other departments of knowledge in centuries past. Our Chemistry, our Botany, our Astronomy, our Geography, our Mechanical appliances and our Historical enquiries, are amazingly in advance of what obtained in generations gone by; and a consciousness of this fact has something to do with the portentous development of that vast intellectual pride and arrogance which unfortunately characterize the tone of many who should yet nourish the humility of the explorer of untraversed and perhaps untraversable regions. A large number of the theories put forth as new in the department of Philosophy are only resurrections of ghosts long since laid low. Why, the fundamental position of the now famous Positive System of Comte is the very same as that assailed so eloquently, by Plato, more than 2000 years ago, viz., that we can only know what our senses can reach, and that therefore our knowledge of the Unseen and Eternal is impossible. Although in carefulness of criticism and of historical research we are certainly improving on the methods of our ancestors, yet in most fundamental conclusions—*i. e.*, reliable and unassailable conclusions, in the sphere of Morals, Metaphysics, and Theology we are not much ahead.

Men seem to forget that just as in the material world there are permanent fundamental elements of being—light, air, moisture—which are never annihilated and often not understood by the exercise of the keenest and most relentless scrutiny, just so in the intellectual and moral world, there are certain unchangeable elements of being—human responsibility, God Holiness, Sin—which no ingenuity, no wit, no determined aversion can remove from actual life. And, speaking from a considerable knowledge of our current literature, I am of opinion that much of the smartness of speech, studied raciness of statement, and high pitched writing on great subjects with which we are familiar, is often more the result of inexperience and lack of calm conscious strength than of depth of thought and complete mastery of the theme in hand. But inasmuch as we have to deal, as practical men, with this state of things, it seems to me to be desirable to render some aid to those who wish to keep their eyes free from the dust which these mighty modern Jehu's cast up in the swiftness of their race to the good of all mental effort. Men, young and old, are apt to be caught in the tangle of a miserable net of reasoning. I have known some made sad and desponding who once were bright and happy, simply by being, unawares, caught in the net of a wretched argument which has bent down their free and cheerful spirits to the low and miserable prospects of a doom at the close of life, no better than that of the dog they play with, or the worm they crush beneath their feet.

Let it be understood, then, that I don't want to make you so skilful, that like the school-men of the middle ages, you may be able to prove to your own and other people's satisfaction, how many hundreds of angels could spin around on the point of a needle, but I do want to lay down a few broad common sense principles which, if recognized and applied in daily life, will enable you to read books with profit, enter into discussions with advantage, and exercise your judgment on all great subjects with some degree of safety.

There is, however, one thing I must premise as an absolute condition of your profiting by anything I may advise or suggest—it is that you will take the trouble to *think*. Nor let any one suppose that this is a needless precaution. For some of us who have much to do with human minds and with providing food for their nourishment, often discover with regret that those whose benefit is sought in the instruction imparted, fail to brace up their minds to that degree of energetic attention which is necessary to ensure a substantial addition to their mental treasures. In that exquisite bit of combined philosophy and humour—Kingsley's "*Water Babies*"—we read of a famous nation, whose name, the *Do-as-you-likes* was derived, like some of the old names of the Bible, from the leading quality in the character they bore. It is said of this great nation of *Do-as-you-likes* that such was their love of



ease and comfort, that when they desired food they were above doing such slow and tedious work as farming, gardening, cooking, and handling gracefully knives and forks, and so, when hungry they used to lie on the ground under the apple trees and just open their mouth till an apple was good enough to fall into it, or else would be somewhere convenient for the roast pigs to run up to them to be eaten. I wonder whether any descendants of this famous nation are to be found among the promiscuous population of Montreal. I wonder whether there are minds so easy-going that they expect to be fed and nourished by the dropping of some delicious morsel that will require no effort of mastication or digestion. I hope they are not here. I hope all present will prove to be of better stuff—persons given to thinking and determined to think. You have no idea of the immense benefit for life that is gained by a resolute and vigorous determination to master a difficult subject.

The gain in such a case is not to be measured by the number of facts or points of information that may be carefully stored in the memory, nor by the glib facility with which you may henceforth be able to converse on the topics in question, but in the greater power of thought and grasp of comprehension, which become a permanent quality of the mind, capable of general application to any subject that may arise to demand consideration. Assuming then, that you intend to think, I would say

1. *Be careful of the disposition you bring to the treatment of any subject.*

It is important to remember that anything you touch is, as soon as you touch it, tinged with the peculiarities of your own nature. Truth exists, and is eternal. Light exists, and will endure. But light often becomes modified in its direction and in its appearance by passing through a new medium—and so truth, when it comes into us, is apt to receive the colouring of our own nature. Its essence is not destroyed any more than the essence of light is when its colour varies, but its representation may be so singular as to destroy much of its effect on others. Now, this fact in mental optics has a two-fold practical bearing. 1. It should cause us not to be too positive in the assertion of our own opinions. What seems truth to us, may not be so to others, and that, not because of our superiority, but because of some condition of mind we have formed. The doctrine of Papal infallibility will appear one thing to the well-drilled, credulous Romanist, and another to you, whose minds have been otherwise trained. Hence you cannot convert men who differ from you by mere positive and dogmatic assertion. A measure of deference is always becoming, and before other minds can be won over, much of the evil work that has been done in them, and on them, should be undone by a steady and imperceptible process of instruction. 2. It should make us careful to keep our disposition pure and truth-loving. There is one

sort of reasoning which goes on straight to its conclusion quite irrespective of the character or mental habits of the reasoner. Whether a man be vicious or holy, his proof that the three angles of a triangle are equal to two right angles would be the same. His disposition would not affect the demonstration of necessary truth. But, on the other hand, it makes all the difference as to what you think, desire, and are, when you begin to handle matters which cannot be proved by figures, circles, and straight lines. It is wonderful how easily men are convinced of what they wish to be convinced of. Then they become brilliant geniuses, who see almost at a glance what you are driving at, and in their eagerness to receive the truth, are ready to exclaim, as the long train of reasoning is being slowly unfolded—‘Hold, enough!’ And, *vice-versa*, we have all known the immense difficulty of bringing men to sound conclusions when their tastes and desires run in a contrary direction. So much is this fact recognised that we have become reconciled to the ungenerous practice of quoting words which compromise the ladies, but which evidently are the reflex of the mind of the stronger sex—

If she will, she will, depend on't  
If she won't, she won't, so there's an end on't.

There have been some notable instances of the perverting power of the disposition on the exercise of Reason. The chief cause of slaveholders not being convinced of the wisdom and justice of Abolition was their aversion to Abolition, because of the limit it would put on their selfishness and greed. One of the chief barriers to Parisians arriving at sound conclusions as to the issue of the late war, was to be found in their desire to see and admit every small advantage on their side, and not to see and admit the losses their arms had sustained. Hence they were like men with a microscope at one eye and an inverted telescope at the other. It was utterly impossible for them to know the truth while a perverse disposition ruled over their intellect and will. The Great Teacher points out this same consideration in His weighty words, “If any man wishes to do the will of God he shall know of the doctrine whether it be of God;” *i.e.*, If any one is seeking to know the truth he shall surely find it if his wishes are of the right sort. I therefore say to you, if you would find out the real truth about anything; if you would exercise your reasoning powers freely and unencumbered; if you would read so as to give due weight to every just consideration advanced, be careful to cherish a pure, truth-loving, candid spirit; see to it that your intellect is not clouded by a hankering after a conclusion that shall accord with some cherished aversion or preference—be willing to face the truth however facing it may go against your pride of heart, your self-conceit, your earthly interests. This high and noble condition of mind is one of the brightest ornaments of a man's character.

It gives him amazing power whenever he expresses an opinion. It sets him above the petty arts of the selfish, and enables him with calm and loving spirit to rise to heights of vision over the fair realm of Truth, that can never be trodden by the foot of the harsh declaimer or the man who loves to see in Truth only a representation of his own earth-born passions. It is next to impossible for an immoral man to study wisely and reasonably the principles of morality, or a deliberate liar to recognize all the beauty and force of truth. I have known and have conversed with infidels and atheists who have boasted of the conclusions to which they had come, and yet who, to my certain knowledge, had never read the Bible with honest care—nor had given any attention to the vast and indestructible evidences on which its veracity is known to rest. The natural effect of such boastful ignorance and horrible blasphemy is to awaken pity for the men who, because they do not like to have God to reign over them and make them holy, wilfully divert their own eyes from the light of truth. Give me the man who unites intellectual accuracy with moral honesty—who strives to clear his perception of all the films of prejudice, vice, and unholy aversion, and from very love of truth and righteousness, pushes his enquiries into every nook and corner where truth may be discovered. Being sound in disposition, other things being equal, he will arrive at sound conclusions.

## 2. *Cultivate the habit of correct thinking.*

One of the great evils that infest the world is that of crude thought expressing itself necessarily in obscure, ill-defined language. It is impossible for a man to reason well on any subject unless he can think clearly, as a habit of mind. The degree to which inaccurate thinking abounds in the world would scarcely be credited by some persons. Mr. Mill, in his book on Liberty, goes so far as to affirm that “on any matter not self-evident there are ninety-nine persons incapable of judging of it for one who is capable” (p. 11.) Whether this sweeping judgment is correct or not, I think all men who have disciplined their minds to severe thought, and are familiar with many crude productions of the age, must feel how much the world suffers from men presuming to reason with great dogmatism who have not mastered the first elements of precision in the habit of thinking. It is so easy to repeat words and fabricate sentences that many do not take the pains to enquire whether they really are able, in precise language, to distinguish thought from thought. Most of the fallacies in the arguments of bad reasoners arise more from inaccuracy of conception than from a dishonest attempt to deceive others. One of the surest methods of convincing a man is to make him feel that you are able to analyse a thing to the utmost nicety, and that your words exactly fit the ideas you intend to convey. Therefore, I say, form the habit of thinking accurately on any subject brought under your notice. Bring your powers of mental concentration and analysis



to bear down upon it with all force, just as you concentrate the power of the eye through a microscope on anything you wish to see as it is. Don't be the mere servants of words and phrases which hang about the memory and sit on the tongue, ready, like so many idle masters, to put themselves forward as the controllers of any thoughts that may be rising in the brain. I have seen little Irish boys, bright, nimble and merry, clothed in trousers made for their elders, and adorned with long-tailed coats reaching almost to the ground; and so I have seen, or thought I have had a glimpse of, bright, useful ideas, covered up and disfigured by loose and awkward words which are more a hindrance than an ornament. I am aware that many people are fond of what is called "fine language," "splendid eloquence," "flashes of genius," and "depth of thoughts," that cannot be penetrated. But much that passes in the world as fine language is after all only fine sound. The measure of excellence in language is the clearness and force with which good ideas are made to enter our minds. Obscurity of style, means crudeness in conception. If a man cannot tell me in plain, precise words, exactly what he means, so that I shall not confound it with something else, then I say he has no correct thought to convey, but only a jumble of thoughts which ought to be disentangled; and one of the first steps to be taken in such a case is to turn his perceptive and analytic faculty in upon the supposed thought until he sees all through it, all around it, and all about it, and so knows it to be in certain points unlike any other thought. We may have feelings, apprehensions, latent yearnings, which will not take form and colour, and consequently are not representable in precise form of speech. But these can never be the materials of reasoning; they are bare existences in a nebulous condition. It is this introduction of ill-defined and undefinable sentiment as the basis of argument which vitiates and renders useless much of the writings of the transcendental school of philosophers, and which leads many less pretentious persons to confound their undisciplined wishes and feelings with clear and solid arguments.

I wish most earnestly you young men would strive to think closely and clearly. It is not by reading a host of superficial books that will make men of you. If you have lived in England you have seen how a rough, heavy, lumbering clod-hopper, whose loose gait and slouching habits have made the nimble arabs of our British city streets to smile, is transformed, after he becomes a recruit, by being subjected to the sharp, healthy discipline which turns out the active, well-developed soldier. Just so there is many a fine mind that might be trained for active service to mankind by a frequent use of the mental drill. If you ask how this is to be accomplished I answer "You have all the materials with you every day—facts around you; books expressing thoughts in words, and your own brains to work on these." The habit of clear thinking is not acquired in a day. It is the work of a life. It may be

secured in a measure by every one who will be determined to understand a subject, and who in his reading will make use of those authors who really have something to say, and know how to say their something so as to be understood.

3. *Separate from the subject in hand everything not essential to it.*

One of the first consequences of forming habits of correct precise thought will be that you will soon see what does and what does not really belong to the particular subject you are considering: in this will be a great advantage, for you will then be led by common sense to put aside all matters which, in the imagination of a crude mind, are made to belong to the question at issue. If you are troubled with contentious companions, and want to prove that a certain tree is an oak and not an elm, you will, as soon as you see that the ivy upon it is no part of the tree, begin to tear it away so that you may lay bare the real tree in all its native simplicity. It is amazing what folds of luxuriant ivy—the growth of dark, neglected minds—have entwined themselves around all the great subjects of human thought. Thus the most important of all things, Religion, has been surrounded by the luxuriant growth of ages, and many think and reason about religion confounding the corruptions and obscurities of time with the incorruptible and unchangeable Child of Eternity. There is one frequent instance of this folly to which special reference may be made. I have read books and heard persons reason about the question of Divine Mediation on behalf of man; and they have become warm and strong, because, forsooth, there are some verbal variations in our English Bible. Now is the oak not an oak because some ivy has grown over part of its trunk? Is a man not a man because the shoemaker has put his feet in Chinese shoes? The oak must be distinguished from the ivy and the man from what is put on his feet. So the reality of Divine Mediation is one thing; the variations which have crept into Manuscripts relating to it are another thing: as you may cut off the ivy and cast away the shoes and leave the oak and man naked, so you may cut off all these questions about readings in versions and Manuscripts, while the great truth of God's mercy in Christ, abides as a fact in human history, as certain as that America was colonized by the English.

One of the chief evils of not separating from a subject things that differ is, that weak and useless arguments will have to be invented for proving what never need be proved; the chiefest of all is that the stability of a perfectly defensible subject will be compromised by the weakness of the argument in defence of those non-essential things with which it is confounded.

The practice of separating from a subject all non-essential elements is acquired by careful observation as to the difference of things, by a distinct recognition of a thing, a fact or a principle as having an existence apart from the accidents which in process of time may rise around them,

and by cultivating on all suitable occasions the exercise of making clear definitions. For purposes of instruction, and for constructing an argument, it is an immense gain of power when you can hold up to the eye of others the clear identical thing about which their thoughts are to be exercised. You may not dazzle by brilliancy of words, but you will do what some men never can do—lodge great principles in the souls of others which will live and shine there for all ages.

4. *Find out reasons which cover the widest ground, and reduce all reasons to their simplest form.*

On the citadel of Plymouth there is an immense gun acting on a swivel, and so placed as to be turned round in a moment to any point of the compass. Its power and position, combined with the skilful mechanical apparatus of the swivel render it the most formidable argument against any forces that might threaten the fortress from any side. Such a gun is clearly of greater service than a score of small pieces, which could only be pointed in a fixed direction and only carry a trifling ball a short distance. Now, this disposition of warlike arguments is a good example of what should be our course, in the use of arguments, which destroy errors and not lives. Select in every instance if you can, one great reason that will sweep the whole circle of the horizon, and get it into such easy play that in a moment you may point it against any host of small pleadings that may be drawn in array against you. Have you never seen how sometimes a person has gone on constructing an elaborate argument with wonderful skill and care, when all at once a single sentence wisely uttered has demolished the whole? There is one good instance of this in a little book called the “Gospel of the Resurrection.” A very elaborate array of small and great arguments is often drawn forth against the miracles recorded in our Lord’s life. One miracle is objected to for one reason, and another for another, and again, general reasons are alleged against all. Now what does this writer do? He raises an historical argument on the commonly admitted principles of historical criticism, and so establishes as a fact the actual Resurrection of Christ from the dead. Having established this on grounds of common historical criticism he is able to turn it in every direction and sweep the whole army of doubts away as to the miracles of the Saviour’s life. The public, unquestionable, historically demonstrated fact of Christ’s Resurrection covers the whole ground of debate, and all the smaller and more obscure miraculous events are taken under the all sufficient shelter of this one.

Then there is another instance to which I may just allude. The question of the abolition of slavery was fiercely debated at one time, and innumerable reasons were adduced, derived from considerations of race, capability, ancient habits, Biblical expressions, social changes, and pecuniary losses, &c., to defend the practice so hoary with age and so



blood-stained with cruelty. But instead of meeting all these arguments separately, the best advocates of abolition put forth one all-comprehensive and indestructible principle that man, because he is man, has freedom for his birthright, as certainly as that he has a heart to feel the anguish of its deprivation.

But observe, you will only be able to lay hold of comprehensive reasons when you have accustomed yourselves to think out general principles and appreciate their vast and wonderful power. It is said of horses and cows that they only know single objects. It may be said of some men that by neglect of their reflective powers, they seldom rise above knowing things in detail. Children think only of particular objects. As they grow in strength they think out the principles of things. Untrained minds are in a state of childhood. The unkempt youth who follows the plough knows a horse, a man, a cart, a bird, a dinner, and so-forth, but he has no notion of a general law of cohesion which runs through them all. He may know a right action, but nothing of a right principle of action. The reason why some books and discourses are called hard and difficult to follow is because they treat of general principles in their various bearings on subordinate principles and on individuals, and the readers, or hearers, have not trained themselves to think out the principle of a thing.

In our readings and discussions we have chiefly to do with the complicated, changeful world of mind, morals and manners, just as in agricultural, mechanical and other pursuits of that sort, we have to do with the world of material forms and forces. It is well for us to remember that this complicated world of mind, morals and manners, is not a huge, unmanageable, disorganized, lawless mass of thoughts, deeds, words and habits—but is the expression of some general laws which work themselves out as orderly and regularly as do the laws of gravitation and cohesion, in the world of matter. You are aware that Chemists are so acquainted with the elements that lie at the base of or enter into the air, the soil, and the light, that from this knowledge they can form a judgment in a moment of what vast and multiform changes would take place in the air, earth and sea, if a variation should occur in the relation of the principal elements of nature. Just so the man whose mind is familiar with general principles sees at a glance the bearing of a great change in human conduct and human thought. This is the comprehensiveness of mind which, when existing in a high degree, makes great Statesmen, great Philosophers, great Poets, great Theologians. It is the opposite of that contractedness of vision which nourishes bigotry and produces the small pettifogging attempts to regulate mankind according to a narrow code of rules which chafe the shoulders of men, as rude-spun leading strings chafe the lads whose upper lip is beginning to be adorned with a much desired down.



If you ask me how you can secure the desired facility in thus acquiring and using general principles, I should say: study books that deal in them; place yourself in contact with strong comprehensive minds; take trouble to learn from teachers who are far above you in breadth of thought; cultivate the habit of looking at things in their connexion with one another and with their causes; and never forget that there is no single thing, reason, or event in the wide earth that exists by itself, but is an expression of some general law or principle, as truly as that every fall of stone, apple or feather is an expression of the universal law of gravity.

5. *Be careful of what is assumed as a starting point.*

As a general rule, whenever you take up a book or listen to an argument, the whole of what is written or said may be reduced or traced back to two or three fundamental assumptions. One of the most important steps is to throw aside all verbiage and superfluous matter, and see really what the foundation is. And if ever you attempt to construct an argument or to teach a class by a process of reasoning, take great care of what you start with. If this be not sound, all will fall to pieces should any one just put his finger on the weak point. Many of the books and articles which have appeared in England in support of the union of Church and State, are elaborately written, and appear to be most compact pieces of reasoning, but when you look closely at them they are found to rest on the unexpressed assumption, that, apart from the patronage and support of civil rulers, religion has not vitality enough to hold its own. Just before leaving England I spent a week or two in Oxford, and one day heard from Dr. Mozley, a most elaborate discourse preached before the University, the object of which was to apologise for Christian nations entering upon war. He wanted to show that Christians must follow warlike pursuits. And the whole argument rested on the assumption that as Christianity—pure, peaceful, loving—happened to be born into a *wicked* world, it must accommodate itself to this circumstance and act accordingly—*i. e.*, Christianity is too pure and good to be carried fully out as society is now circumstanced. The assembled dons of all the colleges, the sanctity of the day, and my natural reverence for good men, had something to do with the silence of my tongue; but my heart burned to say, that I considered the foundation of the whole argument rotten to the core. For this compromise of Christianity with the conditions of sinful life has been, and is, the bane of thousands; and had the blood of those who have fought battles been shed as martyrs because they would not share in war, I believe that such noble and suffering adherence to the example and spirit of Christ would have done more to subdue the world to Him than has been or could be done by the most skilful compromise with the lusts of ambitious men.

6. *Always pay due regard to the subject matter in hand, and expect only such proof as it is susceptible of.*

I have already intimated that there is a great difference between demonstrative and probable reasoning. The one deals with necessary, the other with contingent truth. It is unwise to expect all truth to be subject to the same kind of evidence. And it is equally unwise, and is indicative of narrow culture, to imagine that strict mathematical demonstration is more satisfactory than cumulative moral evidence. For the understanding can see absurdities in rejecting cumulative moral proof, as clearly as the eye can see absurdities in rejecting mathematical demonstration. Indeed, there are many things even in Mathematics you can only prove negatively—*i. e.*, by showing how absurd it would be if they were not true. And so some of the most important moral truths are set forth in a clear light by indicating what would be if they were counted not to be truths. Thus we read in the Psalms: "The fool hath said in his heart there is no God," because, forsooth, it cannot be demonstrated, in the same way as we demonstrate that the angles of the base of an isosceles triangle are equal. But just suppose the contrary—that there is no God—what then? Why, you have the most absurd of absurdities. A universe crowded with the most exquisite and wise arrangements—and yet without an arranger; a beauty and order far beyond what the human mind can conceive or describe—and yet produced by nothing; a limited mind trying to imitate this wonderful variety in beauty and order—and yet no mind greater than the human. This is as absurd as to suppose that two parallel lines can include space, or that man can think and yet not exist.

I say, then, don't be obstinate and one-eyed. Remember that books and men may offer you enough for faith to rest upon till you rise to higher regions, from the elevation of which you will gaze on wider scenes and learn secrets which have been hidden from the foundation of the world.

7. *Prefer the plainest words you can find.*

One of the greatest achievements of the mind is to make things clear to others, and this is to be done by first knowing exactly what you want to say, and then by choosing words which exactly fit the ideas you have to convey. Don't suppose that any words will fit. Words are for obscuring as well as revealing thought. Richness of words often means cloudiness of thinking. Of some speakers and books it may be said still, *verba, verba, præterea nil*. If ever you attempt to speak or write use language simple in construction, easy in its flow, and clear in its terms. It is highly important to keep metaphors and figures of speech out of an argument. They are most excellent in poetry and in didactic discourse, and in appeal, but in an argument they are a perfect nuisance. The

employment of them in reasoning is like offering a stone when hungry ones ask for bread, or like throwing down apples of discord for fallible ones to fight over. Perhaps you remember the story of the Scotchman on his way home one night on horseback. He came to a stream crossing the road, and was afraid to venture over. But observing a man leaning over a gate he called out, "I say, man, is it deep?" and the answer was, "No, man—only muddy." I suppose that might be said of many compositions which present the appearance of profundity.

I will not weary you by any further details. If you would learn how to reason well, let me say by way of summing up what has been said:—Take heed to your disposition: be pure, truth-loving, free from prejudice and aversions, willing to see and accept the truth at any cost. Form the habit of correct thinking by means of self-discipline and good books; separate from the subject you think or read upon whatever is not a part of it, so that you may see it in its simplest integrity. Select always those reasons which cover the widest range and thus dispense with trifles and weaknesses. Take care not to assume, unawares, what may not be admitted, lest you should build on a foundation that will fall away. Make allowance for the different kinds of evidence suitable to different kinds of subjects, and ever speak and write in the plainest and most exact terms.

I dare say the counsels I have ventured to offer, may seem inapplicable to some whose tastes and avocations do not permit of an indulgence in the higher departments of literature, or in such discussions as young men find pleasure in. Be it so. Yet even they can, I hope, find a modicum of profit in observing what pains others must take if they would excel in this line. The ladies are reasoners in their own way. We have not their quick instincts which often, on moral subjects, spring at the conclusion which we can only reach by hard and slow work. Yet I trust the ladies will remember that they should not in these days rely only on the impulse which springs at truth. We want to see them braced up to take part in the more vigorous future which is before us. And as to you young men, I hope you will count your minds to be your true selves, that you will love truth with an imperishable affection, that you will remember the important part you are to take in the development of this young Dominion, and that you will regard the great land which lies beyond the swellings of Jordan, as one of brightness and blessedness to all who love what is true and good; and thus learning meekly of Him who is the Truth, and whom to know is Life Eternal, you will advance from one degree of light to another, till the dimness and shadows of earth shall give place to the light, and life, and joy of an Eternal Home, where we shall know even as we are known.

